

Purchase Order Receipt Listing

Thursday, November 10, 2016 4:36:10 PM

Page 1 of 1

All amounts are calculated in domestic currency.

All Vendors PO ID PO34165 All Receipt Dates All Line Item Types
All Item ID/GL/WOs All Rec. Employees All Currencies
Grouped by Vendor ID

| Purchase Order ID/ Curr Type | Line Nbr/ Insp Req | Project ID | Reference/ Description/ Cert Std | PO U/M / Stock U/M | Required Date Required Qty | Recv Date/ Recv Emp | Recv Qty (PO U/M) | Cost Per Unit/ Recv Value | Inspected Qty/ Rejected Qty (PO U/M) | MRB Qty/ MRB Reject Qty | Book Amt |
|---|-----------------------|------------|--|-----------------------|-------------------------------|------------------------|----------------------|------------------------------|--|----------------------------|----------|
| Vendor ID \ Vendor Name | | | | | | | | | | | |
| PO34165 | 1 | | VU-TW-M001 | TW Metals | | | | | | | |
| USD | No | | M6061T6T0.3125W.0 f 58 | | 11/10/2016 | 11/10/2016 | 48.0000 | | 0.0000 | 0 | \$0.00 |
| | | | ALUM TUBE .3125 f x .058w | | 48.0000 | PLOU01 | | | 0.0000 | 0 | |
| | | | m136101 | | | | | | | | |
| | 2 | | M6061T6T0.375W.05 f 8 | | 11/10/2016 | 11/10/2016 | 48.0000 | | 0.0000 | 0 | \$0.00 |
| | No | | 6061-T6 RD Tube .375 x.058W | f | 48.0000 | PLOU01 | | | 0.0000 | 0 | |
| | | | m136101 | | | | | | | | |
| | 3 | | M6061T6T51.000W. f 120 | | 11/10/2016 | 11/10/2016 | 21.0830 | | 0.0000 | 0 | \$0.00 |
| | No | | 6061T6 SQ TUBE 1.00 x 1.00 X .120w | f | 20.0000 | PLOU01 | | | 0.0000 | 0 | |
| | | | m136101 | | | | | | | | |
| | 4 | | 71401-45 | | 11/10/2016 | 11/10/2016 | 1.0000 | | 0.0000 | 0 | \$0.00 |
| | No | | procurement quality clauses | | 1.0000 | PLOU01 | | | 0.0000 | 0 | |
| | | | m136101 | | | | | | | | |
| Total Received Quantity: | | | | | | | | | | | |
| Total Qty to Inspect (PO U/M): 118.0830 | | | | | | | | | | | |
| Total Reject Quantity: 0.0000 | | | | | | | | | | | |
| Total Receipt Value: \$0.00 | | | | | | | | | | | |
| Total Balance Due Quantity: 0.0000 | | | | | | | | | | | |

Total Received Quantity:
Total Qty to Inspect (PO U/M):
Total Reject Quantity:
Total Receipt Value:
Total Balance Due Quantity:



O'Neal High-Performance Metals Group



Packing Slip

ORDER NO.: 80816862 FROM: CHIC PAGE 1

CUST NUMBER: 1203820 NET WGT: 13.477 REQ.DATE: 11/10/16 CONFIRMED
 SOLD TO: SHIP TO:
 DART AEROSPACE LTD DART AEROSPACE LTD
 1270 ABERDEEN ST 1270 ABERDEEN ST
 HAWKESBURY ON HAWKESBURY ON
 CANADA ONTARIO CANADA
 CN K6A 1K7 CN K6A 1K7

SALESPERSON: DONNA SMALLEY
 TERMS: NET 30 DAYS
 F.O.B.: SHIPPING POINT
 CUST ORD NO.: PO34165
 SHIP BY: 11/07/16
 VIA: COMMON CARRIER
 FREIGHT: PREPAID
 RELEASE NO.:
 RECEIVING PHONE:
 WIDTH LENGTH
 12 FT ML

LINE ITEM DESCRIPTION
 0001 41723 D6061-T6 5/16 OD X .058 WA
 CLN# ORD QTY INVOICE QTY SHIPPED QTY WT
 48.000 FT 48.000 FT 48.000 FT 2.621

** 1 TEST REPORTS REQUIRED **
 ** 1 CERTS REQUIRED **
 ECCN: EAR99 Export License: NLR
 PO:49354489 HT:388604 PC: 4 Expiration Date: 0/00/00
 MLT:UNITED STATES MFG:UNITED STATES CUSTOMER QTY: UOM
 SLB/CL:388604

0002 45963 E6061-T6 SQ-SC TUBE 1 SQ X .125 WA
 CLN# ORD QTY INVOICE QTY SHIPPED QTY WT
 20.000 FT 21.083 FT 21.083 FT 10.856

** 1 TEST REPORTS REQUIRED **
 ** 1 CERTS REQUIRED **
 ECCN: EAR99 Export License: NLR
 PO:49357348 HT:201617624 PC: 1 Expiration Date: 0/00/00
 MLT:UNITED STATES MFG:UNITED STATES CUSTOMER QTY: UOM
 SLB/CL:272901

BROKERS KUEHNE AND NAGEL LTD

| AREA | | TYPE OF PKG | | PACK INFO | | | |
|------|--------|-------------|--|-----------|------------|--------|----------|
| YRC | | | | PKGS | GRS WEIGHT | WIDTH | LENGTH |
| | CARTON | | | 1.000 | 41.000 | 2.0000 | 150.0000 |
| YRC | CARTON | | | 1.000 | 7.000 | 5.5000 | 263.0000 |
| | | | | 2.000 | 48.000 | | |

BY: MG

THANK YOU FOR THIS ORDER

TERMS AND CONDITIONS APPLICABLE TO THE SALE OF THESE
 PRODUCTS ARE SET FORTH ON OUR WEBSITE FOR YOUR CAREFUL
 REVIEW.
<http://www.twmetals.com/invoice-terms.html>



O'Neal High-Performance Metals Group



**Packing
Slip**

ORDER NO.: 60618920

FROM: CRAN

PAGE 1

CUST NUMBER: 1203820 NET WGT: 3.254 REQ.DATE: 11/10/16 CONFIRMED
SOLD TO: SHIP TO:
DART AEROSPACE LTD DART AEROSPACE LTD
1270 ABERDEEN ST 1270 ABERDEEN ST
HAWKESBURY ON HAWKESBURY ON
CANADA CN K6A 1K7 ONTARIO CANADA CN K6A 1K7

SALESPERSON: DONNA SMALLEY SHIP BY: 11/07/16
TERMS: NET 30 DAYS VIA: COMMON CARRIER
F.O.B.: SHIPPING POINT FREIGHT: PREPAID
CUST ORD NO.: PO34165 RELEASE NO.:
RECEIVING PHONE:

LINE ITEM DESCRIPTION WIDTH LENGTH
0001 41952 D6061-T6 3/8 OD X .058 WA 12 FT ML

CLN# ORD QTY INVOICE QTY SHIPPED QTY WT PCS
48.000 FT 48.000 FT 48.000 FT 3.254 4

** 1 TEST REPORTS REQUIRED **

** 1 CERTS REQUIRED **

ECCN: EAR99 Export License: NLR Expiration Date: 0/00/00
PO:49347470 HT:111040 PC: 4 CUSTOMER QTY: 48.000 UOM FT
MLT:UNITED STATES MFG:UNITED STATES SLB/CL:402873

BROKERS KUEHNE AND NAGEL LTD

| AREA | | TYPE OF PKG | PKGS | GRS WEIGHT | WIDTH | LENGTH | HGHT |
|------|--|-------------|-------|------------|-------|---------|------|
| B | | CARTON | 1.000 | 8.000 | | 12.5000 | |

BY: ED
RT 000-

UNLOAD TYPE: NONE SPECIFIED

DAS
26
9-89

NOV 10 2016

DATE SHIPPED

DATE FILLED

THANK YOU FOR THIS ORDER

TERMS AND CONDITIONS APPLICABLE TO THE SALE OF THESE
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O'Neal High-Performance Metals Group



**Packing
Slip**

ORDER NO.: 80816862 FROM: CHIC PAGE 2

| | | | |
|----------------------|--------------------|--------------------|------------|
| CUST NUMBER: 1203820 | NET WGT: 13.477 | REQ.DATE: 11/10/16 | CONFIRMED |
| SOLD TO: | SHIP TO: | | |
| DART AEROSPACE LTD | DART AEROSPACE LTD | | |
| 1270 ABERDEEN ST | 1270 ABERDEEN ST | | |
| HAWKESBURY ON | HAWKESBURY ON | | |
| CANADA | CN K6A 1K7 | ONTARIO CANADA | CN K6A 1K7 |

| | | | |
|---------------|----------------|------------------|----------------|
| SALESPERSON: | DONNA SMALLEY | SHIP BY: | 11/07/16 |
| TERMS: | NET 30 DAYS | VIA: | COMMON CARRIER |
| F.O.B.: | SHIPPING POINT | FREIGHT: | PREPAID |
| CUST ORD NO.: | PO34165 | RELEASE NO.: | |
| | | RECEIVING PHONE: | |

LINE ITEM DESCRIPTION
RT 000-

WIDTH LENGTH
UNLOAD TYPE: NONE SPECIFIED

DATE SHIPPED _____

DATE FILLED _____

THANK YOU FOR THIS ORDER

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PRODUCTS ARE SET FORTH ON OUR WEBSITE FOR YOUR CAREFUL
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O'Neal High-Performance Metals Group



**Packing
Slip**

ORDER NO.: 60618920

FROM: CRAN

PAGE 2

| | | | |
|----------------------|--------------------|--------------------|------------|
| CUST NUMBER: 1203820 | NET WGT: 3.254 | REQ.DATE: 11/10/16 | CONFIRMED |
| SOLD TO: | SHIP TO: | | |
| DART AEROSPACE LTD | DART AEROSPACE LTD | | |
| 1270 ABERDEEN ST | 1270 ABERDEEN ST | | |
| HAWKESBURY ON | HAWKESBURY ON | | |
| CANADA | CN K6A 1K7 | ONTARIO CANADA | CN K6A 1K7 |

| | | | |
|------------------|----------------|--------------------|----------|
| SALESPERSON: | DONNA SMALLEY | SHIP BY: | 11/07/16 |
| TERMS: | NET 30 DAYS | 27 ENGLEHARD DRIVE | |
| F.O.B.: | SHIPPING POINT | MONROE TWP | NJ 08831 |
| CUST ORD NO.: | PO34165 | | |
| VIA: | COMMON CARRIER | | |
| FREIGHT: | PREPAID | | |
| RELEASE NO.: | | | |
| RECEIVING PHONE: | | | |

"TW Metals MSDS data is available on our web site at www.twmetals.com. MSDS data can be found under the Technical Resources Tab, Product Statistics & Data and the TW Metals MSDS's heading. If you do not have web site access you may telephone 610-458-1300 and we will mail or fax a copy of our current MSDS data to your location."

"CERTIFICATE OF CONFORMANCE"

"TW Metals certifies that the material supplied on this purchase order and contained in the heat/lot number referenced above has been manufactured, inspected, and tested in accordance with the material specification. These records are on file at TW Metals. Packaging material for shipments to Europe and China consists of manufactured wood products and complies with the European emergency measures for coniferous non-manufactured wood packing material"

Authorized Test Report Clerk Camelanch Date: 11/04/16

These commodities have been exported from the United States in accordance with the U.S. export control laws, export administrations regulations. Diversion contrary to U.S. law prohibited.

THANK YOU FOR THIS ORDER

TERMS AND CONDITIONS APPLICABLE TO THE SALE OF THESE PRODUCTS ARE SET FORTH ON OUR WEBSITE FOR YOUR CAREFUL REVIEW.
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O'Neal High-Performance Metals Group



**Packing
Slip**

ORDER NO.: 80816862 FROM: CHIC PAGE 3

CUST NUMBER: 1203820 NET WGT: 13.477 REQ.DATE: 11/10/16 CONFIRMED
SOLD TO: SHIP TO:
DART AEROSPACE LTD DART AEROSPACE LTD
1270 ABERDEEN ST 1270 ABERDEEN ST
HAWKESBURY ON HAWKESBURY ON
CANADA ONTARIO CANADA
CN K6A 1K7 CN K6A 1K7

SALESPERSON: DONNA SMALLEY SHIP BY: 11/07/16
TERMS: NET 30 DAYS 235 TUBEWAY
F.O.B.: SHIPPING POINT CAROL STREAM IL 60188
CUST ORD NO.: PO34165
VIA: COMMON CARRIER
FREIGHT: PREPAID
RELEASE NO.:
RECEIVING PHONE:

"TW Metals MSDS data is available on our web site at www.twmetals.com. MSDS data can be found under the Technical Resources Tab, Product Statistics & Data and the TW Metals MSDS's heading. If you do not have web site access you may telephone 610-458-1300 and we will mail or fax a copy of our current MSDS data to your location."

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Authorized Test Report Clerk *Maria D. Luluan* Date: 11/07/16

These commodities have been exported from the United States in accordance with the U.S. export control laws, export administrations regulations. Diversion contrary to U.S. law prohibited.

THANK YOU FOR THIS ORDER

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KAISER ALUMINUM FABRICATED PRODUCTS

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

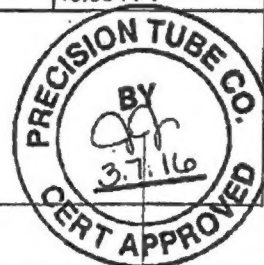
KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
2425 STEVENS DRIVE
RICHLAND, WA 99352

TW METALS

MAY 23 16

ACCEPTED BY

| | | | | | |
|---|---------------------------|--|---|---|----------------------|
| CUSTOMER PO NUMBER: PTC1425 | | CUSTOMER PART NUMBER: SPIRIT-371850 | | PRODUCT DESCRIPTION: 5.400 LB/PC .500 LB/-0 LB 1.312 OD X .085 WALL ESRT | |
| KAISER ORDER NUMBER: 319936 | LINE ITEM: 001 | SHIP DATE: 02/26/2016 | KAISER LOT NUMBER: 50751-320 | ALLOY: 6061 | TEMPER: O |
| WEIGHT SHIPPED: 16980.000 LB | QUANTITY: 3057.000 PCS | B/L NUMBER: 004962 | DIAM/DA/THKNS: | WIDTH: | LENGTH: 13.984 FT |
| SHIP TO: PRECISION TUBE CO 287 WISSAHICKON AVENUE N. WALES, PA 19454 USA | | | SOLD TO: MUELLER INDUSTRIES, INC PRECISION TUBE 8285 TOURNAMENT DRIVE STE. 150 MEMPHIS, TN 38125 USA | | |



Actual Physical Properties

| REFERENCE | DASH# | SAMPLE# | UTS(KSI) | YTS(KSI) | %Elong in 2 | HARDNESS | CONDUCT. | BEND |
|-----------|-------|---------|----------|----------|-------------|----------|----------|------|
| 50751-320 | 0001 | 0002 | 17.5 | 5.1 | 27.4 | NA N/A | N/A | N/A |
| 50751-320 | 0001 | 0003 | 17.7 | 5.9 | 27.6 | NA N/A | N/A | N/A |
| 50751-320 | 0001 | 0004 | 18.1 | 6.2 | 25.2 | NA N/A | N/A | N/A |
| 50751-320 | 0001 | 0005 | 17.7 | 4.8 | 27.9 | NA N/A | N/A | N/A |
| 50751-320 | 0001 | 0006 | 18.1 | 5.6 | 27.0 | NA N/A | N/A | N/A |
| 50751-320 | 0001 | 0007 | 17.7 | 5.3 | 28.5 | NA N/A | N/A | N/A |
| 50751-320 | 0001 | 0008 | 18.0 | 5.5 | 29.2 | NA N/A | N/A | N/A |
| 50751-320 | 0001 | 0009 | 17.3 | 4.5 | 26.6 | NA N/A | N/A | N/A |
| 50751-320 | 0001 | 0010 | 17.0 | 5.9 | 27.9 | NA N/A | N/A | N/A |
| 50751-320 | 0001 | 0011 | 18.0 | 6.1 | 28.7 | NA N/A | N/A | N/A |
| 50751-320 | 0001 | 0012 | 17.3 | 5.8 | 27.2 | NA N/A | N/A | N/A |
| 50751-320 | 0001 | 0013 | 17.3 | 5.0 | 28.3 | NA N/A | N/A | N/A |
| 50751-320 | 0001 | 0014 | 17.7 | 6.3 | 27.2 | NA N/A | N/A | N/A |
| 50751-320 | 0001 | 0015 | 17.5 | 6.0 | 28.2 | NA N/A | N/A | N/A |
| 50751-320 | 0001 | 0016 | 16.8 | 5.6 | 25.4 | NA N/A | N/A | N/A |
| 50751-320 | 0001 | 0017 | 17.0 | 5.0 | 25.8 | NA N/A | N/A | N/A |
| 50751-320 | 0001 | 0001 | 17.0 | 5.9 | 27.9 | N/A | N/A | N/A |

Chemical Composition (wt%), Aluminum Remainder

| LIMITS | Si | Fe | Cu | Mn | Mg | Cr | Zn | Ti | Pb | Bi | Zr | Ea | Tot |
|---------|------|------|------|------|------|------|------|------|-----|-----|-----|------|-----|
| Maximum | 0.80 | 0.70 | 0.40 | 0.15 | 1.20 | 0.35 | 0.25 | 0.15 | NA | NA | NA | 0.05 | .15 |
| Minimum | 0.40 | 0.00 | 0.15 | 0.00 | 0.80 | 0.04 | 0.00 | 0.00 | NA | NA | NA | 0.00 | .0 |
| F75645 | .60 | .30 | .22 | .05 | .98 | .10 | .06 | .02 | .00 | .00 | .00 | .01 | .02 |
| F75642 | .61 | .32 | .22 | .05 | .96 | .09 | .06 | .02 | .00 | .00 | .00 | .01 | .02 |

Applicable Requirements:

ASTM-B241-12 NON-STENCILED ASTM-B221-13 ASTM-B345-11 AMS-QQ-A-200/B 97(R07) TYPE I
UNS#A96061 Also conforms to EN 10204 3.1

Plant Serial: 00013627
Kaiser Order Number: 319936
Line Item: 001

KAISER
ALUMINUM
FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
2425 STEVENS DRIVE
RICHLAND, WA 99352

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

Miscellaneous Notes

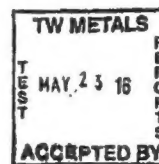
MANUFACTURED IN USA MELTED IN USA
MERCURY IS NOT A NORMAL BACKGROUND ELEMENT IN ALUMINUM ALLOYS. NEITHER MERCURY NOR ANY
OF ITS COMPOUNDS ARE UTILITZED BY KAISER ALUMINUM IN THE MANUFACTURE OF THIS MATERIAL.

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been
inspected and tested and found in conformance with applicable specifications forming a part of the
description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on
Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

JOSEPH AMBS, QUALITY MANAGER

Jph





A COMPANY OF MUELLER INDUSTRIES

PRECISION TUBE CO.
287 WISSAHICKON AVE.
NORTH WALES PA 19454

Control No: 1604

CERTIFIED TEST REPORT

| CUSTOMER PURCHASE ORDER NO. | CUST. ORD. NO. | PRECISION TUBE P/N |
|-----------------------------|----------------|--------------------|
| 49354489 LINE 001 | 422327 | 24A031250580005 |

SOLD: TW METALS
TO 175 TUBEWAY
FOREST PARK, GA 30298
UNITED STATES

SHIP: TW METALS
TO 175 TUBEWAY
FOREST PARK, GA 30298
UNITED STATES

| QUANTITY ORD. | DESCRIPTION | QTY. SHIPPED | DATE SHIPPED |
|---------------|---|--------------|--------------|
| 1824 FT | METAL - 6061 ALUM TEMPER T6 SPEC - AMS 4082P ASTM-B-210-12 AMS-WW-T-700/6C LENGTH - 12 FT LGTH TOL +.1250 IN -.0000 IN SHAPE - ROUND FINISH - STRAIGHT EXACT LENGTHS OD .3125 +.0030 -.0030 ID .3125 +.0030 -.0030 WALL .0580 +.0040 -.0040 | 2004 FT | 08/05/16 |

MECHANICAL PROPERTIES

| SAMPLE # | TENSILE STRENGTH (P.S.I.) | YIELD STRENGTH (P.S.I.) | ELONGATION IN 2 INCHES (%) | ROCKWELL HARDNESS | AVERAGE GRAIN SIZE (MM.) |
|----------|---------------------------|-------------------------|----------------------------|-------------------|--------------------------|
| 1 | 45,775 | 40,439 | 17 | | |

TEST REPORTS

DESTRUCTIVE TESTS

ACCEPTED BY

49354489
AUG 09 2016

Comments: FAR BAA COMPLIES, DFARS BAA COMPLIES, FAR TAA COMPLIES

NON-DESTRUCTIVE TESTS

EDDY CURRENT: PASS

TW METALS

CHEMICAL COMPOSITION

| | | |
|--|---------------------------------|--|
| ALLOY: 6061 | HEAT: | TRACEABILITY #: 388604 |
| | | RAW MATL VENDOR: BTC2249 - Kaiser Aluminum |
| Min | Si 0.40 Fe 0.70 Cu 0.15 Mn 0.15 | Mg 0.80 Cr 0.04 Zn 0.25 Ti 0.15 Al Rem. |
| Max | 0.80 0.70 0.40 0.15 | 1.20 0.35 0.25 0.15 |
| OTHER ELEMENTS: 0.05 MAX EACH / 0.15 MAX TOTAL | | |

We hereby certify that the material has been manufactured and tested in accordance with the requirements of the applicable specifications and descriptions set forth on Precision Tube's sales acknowledgement. During the manufacturing, testing and inspection, the product did not come into direct contact with mercury or any of its compounds, nor with any mercury containing device employing a single boundry containment. Test results indicate that the material is compliant with the current revision of the RoHS Directive (2011/65/EU).

Melted and Manufactured in USA
QMS Registered to ISO 9001: 2008

By:

Art Onaitis

Art Onaitis
QA Manager

08/05/16

Page: 1 of 1

AG



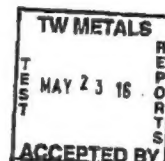
A COMPANY OF MUELLER INDUSTRIES

PRECISION TUBE CO.
287 WISSAHICKON AVE.
NORTH WALES PA 19454

Control No: 930

CERTIFIED TEST REPORT

| | | | | | | | | | |
|--|---|----------------------------|--|--|--------------------------------|------|------|------|------|
| CUSTOMER PURCHASE ORDER NO. 49347470 LINE 001 | | CUST. ORD. NO. 402873 | | PRECISION TUBE P/N 24A037500580006 | | | | | |
| SOLD: TW METALS TO 235 TUBEWAY CAROL STREAM, IL 60188 UNITED STATES | | | SHIP: TW METALS TO 235 TUBEWAY CAROL STREAM, IL 60188 UNITED STATES | | | | | | |
| QUANTITY ORD. | DESCRIPTION | | | QTY. SHIPPED | DATE SHIPPED | | | | |
| 4704 FT | METAL - 6061 ALUM TEMPER - T6 SPEC - AMS 4082P AMS-WW-T-700/6C ASTM-B-210-12 LENGTH - 12 FT LGTH TOL +.1250 IN -.0000 IN SHAPE - ROUND FINISH - STRAIGHT EXACT LENGTHS OD .3750 +.0030 -.0030 ID WALL .0580 +.0040 -.0040 | | | 4992 FT | 05/17/16 | | | | |
| MECHANICAL PROPERTIES | | | | | | | | | |
| SAMPLE # | TENSILE STRENGTH (P.S.I.) | YIELD STRENGTH (P.S.I.) | ELONGATION IN 2 INCHES (%) | ROCKWELL HARDNESS | AVERAGE GRAIN SIZE (MM.) | | | | |
| 1 | 45,627 | 40,428 | 17 | | | | | | |
| DESTRUCTIVE TESTS | | | | | | | | | |
| FLATTENING: PASS | | | | | | | | | |
| Comments: | | | | | | | | | |
| NON-DESTRUCTIVE TESTS | | | | | | | | | |
| EDDY CURRENT: PASS | | | | | | | | | |
| CHEMICAL COMPOSITION | | | | | | | | | |
| ALLOY: 6061 | | HEAT: | | TRACEABILITY #: 111040 | | | | | |
| | | | | RAW MATL VENDOR: PTC1425 - Kaiser Aluminum | | | | | |
| | Si | Fe | Cu | Mn | Mg | Cr | Zn | Ti | Al |
| Min | 0.40 | | 0.15 | | 0.80 | 0.04 | | | Rem. |
| Max | 0.80 | 0.70 | 0.40 | 0.15 | 1.20 | 0.35 | 0.25 | 0.15 | |
| OTHER ELEMENTS: 0.05 MAX EACH / 0.15 MAX TOTAL | | | | | | | | | |



We hereby certify that the material has been manufactured and tested in accordance with the requirements of the applicable specifications and descriptions set forth on Precision Tube's sales acknowledgement. During the manufacturing, testing and inspection, the product did not come into direct contact with mercury or any of its compounds, nor with any mercury containing device employing a single boundary containment. Test results indicate that the material is compliant with the current revision of the RoHS Directive (2011/65/EU).

Melted and Manufactured In USA
QMS Registered to ISO 9001: 2008

By:

Art Onatlis
QA Manager

05/17/16

Page: 1 of 1

UNB

KAISER ALUMINUM FABRICATED PRODUCTS

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
2425 STEVENS DRIVE
RICHLAND, WA 99352

| | | | | | |
|---|---------------------------|--|---|--|----------------------|
| CUSTOMER PO NUMBER: PTC2249 | | CUSTOMER PART NUMBER: SPIRIT-371850 | | PRODUCT DESCRIPTION: 5.400 LB/PC .500 LB/0 LB 1.312 OD X .085 WALL ESRT | |
| KAISER ORDER NUMBER: 320031 | LINE ITEM: 001 | SHIP DATE: 04/01/2016 | KAISER LOT NUMBER: 50751-323 | ALLOY: 6061 | TEMPER: O |
| WEIGHT SHIPPED: 16135.000 LB | QUANTITY: 2913.000 PCS | B/L NUMBER: 004991 | DIAM/DAF/THKNS: | WIDTH: | LENGTH: 13.984 FT |
| SHIP TO: PRECISION TUBE CO 287 WISSAHICKON AVENUE N. WALES, PA 19454 USA | | | SOLD TO: MUELLER INDUSTRIES, INC PRECISION TUBE 8285 TOURNAMENT DRIVE STE. 150 MEMPHIS, TN 38125 USA | | |



Actual Physical Properties

| REFERENCE | DASH# | SAMPLE# | UTS(KSI) | YTS(KSI) | %Elong in 2 | HARDNESS | CONDUCT. | BEND |
|-----------|-------|---------|----------|----------|-------------|----------|----------|------|
| 50751-323 | 0001 | 0002 | 17.3 | 5.9 | 26.7 | NA N/A | N/A | N/A |
| 50751-323 | 0001 | 0003 | 17.3 | 5.9 | 26.7 | NA N/A | N/A | N/A |
| 50751-323 | 0001 | 0004 | 17.3 | 5.4 | 27.2 | NA N/A | N/A | N/A |
| 50751-323 | 0001 | 0005 | 18.0 | 6.1 | 28.0 | NA N/A | N/A | N/A |
| 50751-323 | 0001 | 0006 | 17.4 | 5.7 | 26.4 | NA N/A | N/A | N/A |
| 50751-323 | 0001 | 0007 | 17.9 | 6.2 | 27.6 | NA N/A | N/A | N/A |
| 50751-323 | 0001 | 0008 | 17.5 | 5.8 | 26.6 | NA N/A | N/A | N/A |
| 50751-323 | 0001 | 0009 | 17.7 | 5.7 | 28.6 | NA N/A | N/A | N/A |
| 50751-323 | 0001 | 0010 | 16.9 | 5.6 | 25.2 | NA N/A | N/A | N/A |
| 50751-323 | 0001 | 0011 | 17.6 | 5.8 | 27.9 | NA N/A | N/A | N/A |
| 50751-323 | 0001 | 0012 | 17.8 | 6.9 | 27.4 | NA N/A | N/A | N/A |
| 50751-323 | 0001 | 0013 | 18.1 | 6.1 | 27.2 | NA N/A | N/A | N/A |
| 50751-323 | 0001 | 0014 | 17.4 | 5.7 | 28.3 | NA N/A | N/A | N/A |
| 50751-323 | 0001 | 0015 | 17.0 | 5.6 | 28.6 | NA N/A | N/A | N/A |
| 50751-323 | 0001 | 0016 | 18.2 | 5.8 | 26.6 | NA N/A | N/A | N/A |

Chemical Composition (wt%), Aluminum Remainder

| LIMITS | Si | Fe | Cu | Mn | Mg | Cr | Zn | Ti | Pb | Bi | Zr | Ea | Tot |
|---------|------|------|------|------|------|------|------|------|-----|-----|-----|------|-----|
| Maximum | 0.80 | 0.70 | 0.40 | 0.15 | 1.20 | 0.35 | 0.25 | 0.15 | NA | NA | NA | 0.05 | .15 |
| Minimum | 0.40 | 0.00 | 0.15 | 0.00 | 0.80 | 0.04 | 0.00 | 0.00 | NA | NA | NA | 0.00 | .0 |
| F75366 | .58 | .29 | .22 | .06 | .98 | .08 | .05 | .02 | .00 | .00 | .00 | .01 | .02 |

Applicable Requirements:

ASTM-B241-12 NON-STENCILED ASTM-B221-13 ASTM-B345-11 AMS-QQ-A-200/B 97(R07) TYPE I
UNS#A96061 Also conforms to EN 10204 3.1

TEST REPORTS
ACCEPTED BY

49354489
AUG 09 2016

TW METALS

116

**KAISER
ALUMINUM
FABRICATED PRODUCTS**

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
2425 STEVENS DRIVE
RICHLAND, WA 99352

Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA
MERCURY IS NOT A NORMAL BACKGROUND ELEMENT IN ALUMINUM ALLOYS. NEITHER MERCURY NOR ANY
OF ITS COMPOUNDS ARE UTILIZED BY KAISER ALUMINUM IN THE MANUFACTURE OF THIS MATERIAL.

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been
inspected and tested and found in conformance with applicable specifications forming a part of the
description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on
Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

JOSEPH AMES, QUALITY MANAGER

Jph

**TEST REPORTS
ACCEPTED BY**

AUG 09 2016

Sh
TW METALS

Plant Serial: 00013829
Kaiser Order Number: 320031
Line Item: 001

AG



Service Center Metals

5850 Quality Way

Prince George, VA 23875

Can Do.

CERTIFIED INSPECTION REPORT AND TEST RESULTS FOR EXTRUDED PRODUCTS



BILL TO

TW METALS-Exton, PA

SHIP TO

TW METALS-Carol Stream, IL

Quantity Certified 3,127 lbs 288 pcs

MANIFEST NUMBER

310767

CUSTOMER PO

M49357348

CUSTOMER PART NUMBER

45963

DIE NUMBER

HSQ0321

DATE OF SHIPMENT

10/13/2016

ALLOY / TEMPER

6061-T6

SALESPERSON

Ellis Williams

CERTIFICATION

ASTM-B221-14 SPOT STENCILLED

SPECIFICATION

AMS-QQA-200/8 Rev-A

OUR ORDER NUMBER
272901

ITEM

1

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown. This product is RoHS-2, REACH, and DfARS compliant.

Mechanical Properties

Tests

Lot No.

16 201617624

Test Date

10/10/16

Ultimate Tensile
Strength (KSI)

min 44.40

max 48.30

Yield Strength
(KSI)

min 41.50

max 46.00

Percent
Elongation

min 11.35

max 15.05



Chemical Composition for Aluminum Alloy 6061

| Cast # | Lot No. | Alloy | Si | Fe | Cu | Mn | Mg | Cr | Zn | Ti | Al | Each | Others | Total | Melt Source: |
|-----------|-----------|-------|------|------|------|------|------|------|------|------|-------|------|--------|-------|--------------------------|
| 2M160918Y | 201617624 | 6061 | 0.63 | 0.24 | 0.21 | 0.07 | 0.89 | 0.07 | 0.01 | 0.02 | 97.88 | 0.05 | 0.15 | | United States of America |
| 2M160919B | 201617624 | 6061 | 0.60 | 0.25 | 0.20 | 0.07 | 0.87 | 0.07 | 0.01 | 0.02 | 97.92 | 0.05 | 0.15 | | United States of America |

SCM is ISO 9001-2008 certified

SCM products are melted and extruded in the USA

Calvin J. Wiggins, Director of Quality & Technical Services

Print Date: 10/13/2016

Rev 9/8/16

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: 6061 T6 T.375 W.058

PO / BATCH NO.: 34165/136101

DATE: 11/11/13

MATERIAL CERT REC'D: yes

THICKNESS ORDERED: .375

QUANTITY RECEIVED: 48'

THICKNESS RECEIVED: .375

QUANTITY INSPECTED: 48'

SHEET SIZE ORDERED: _____

QUANTITY REJECTED: _____

SHEET SIZE RECEIVED: _____

| DESCRIPTION | NCR (Check Y/N) | | COMMENTS |
|--|------------------------------------|------------------------------------|---------------------|
| SURFACE DAMAGE | Y | <input checked="" type="radio"/> N | |
| CORRECT FINISH | <input checked="" type="radio"/> Y | N | |
| CORROSION | Y | <input checked="" type="radio"/> N | |
| CORRECT GRAIN DIRECTION | <input checked="" type="radio"/> Y | N | |
| CORRECT MATERIAL | <input checked="" type="radio"/> Y | N | 6061 T6 |
| CORRECT THICKNESS | <input checked="" type="radio"/> Y | N | .375 |
| PHOTO REQUIRED | Y | <input checked="" type="radio"/> N | |
| CORRECT MATERIAL | <input checked="" type="radio"/> Y | N | AMS 4082 |
| CORRECT REF # TO LINK CERT | <input checked="" type="radio"/> Y | N | HEAT # 110410 |
| CORRECT MATERIAL IDENTIFICATION | <input checked="" type="radio"/> Y | N | 6061 T6 T.375 W.058 |
| CORRECT M# ON THE MATERIAL | <input checked="" type="radio"/> Y | N | M136101 |
| DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF | Y | <input checked="" type="radio"/> N | |
| DOES THIS REQUIRE AN EXTRUSION REPORT | Y | <input checked="" type="radio"/> N | |

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.
RECORD RESULTS BELOW

| TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING | HRC | HRB | DUR A | DUR D |
|---|-----|-----|-------|-------|
| | | | | |
| | | | | |

testers located in the Quality Office

QC 18 INSPECTION

ENGINEERING SIGNOFF (if required)

INSPECTED BY: [Signature]

SIGNED OFF BY: _____

DATE: 11/11/13

DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T6 T.3125W.058
 DATE: 16/11/13

PO / BATCH NO.: 34115/136101

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 48'
 QUANTITY INSPECTED: 48'
 QUANTITY REJECTED: _____

THICKNESS ORDERED: .3125
 THICKNESS RECEIVED: .310
 SHEET SIZE ORDERED: _____
 SHEET SIZE RECEIVED: _____

| DESCRIPTION | NCR (Check Y/N) | COMMENTS |
|--|---|----------------------------|
| SURFACE DAMAGE | Y <input checked="" type="checkbox"/> N | |
| CORRECT FINISH | <input checked="" type="checkbox"/> Y N | |
| CORROSION | Y <input checked="" type="checkbox"/> N | |
| CORRECT GRAIN DIRECTION | <input checked="" type="checkbox"/> Y N | |
| CORRECT MATERIAL | <input checked="" type="checkbox"/> Y N | <u>M6061T6</u> |
| CORRECT THICKNESS | <input checked="" type="checkbox"/> Y N | <u>.310</u> |
| PHOTO REQUIRED | Y <input checked="" type="checkbox"/> N | |
| CORRECT MATERIAL | <input checked="" type="checkbox"/> Y N | <u>ASTM-B-210-12</u> |
| CORRECT REF # TO LINK CERT | <input checked="" type="checkbox"/> Y N | <u>HEAT # 388609</u> |
| CORRECT MATERIAL IDENTIFICATION | <input checked="" type="checkbox"/> Y N | <u>M6061T6 T.3125W.058</u> |
| CORRECT M# ON THE MATERIAL | <input checked="" type="checkbox"/> Y N | <u>M136101</u> |
| DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF | Y <input checked="" type="checkbox"/> N | |
| DOES THIS REQUIRE AN EXTRUSION REPORT | Y <input checked="" type="checkbox"/> N | |

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.
 RECORD RESULTS BELOW

| | HRC | HRB | DUR A | DUR D | |
|------------------------------|-----|-----|-------|-------|--|
| TYPE OF MATERIAL | | | | | |
| SIZE OF TEST SAMPLE | | | | | |
| HARDNESS / DUROMETER READING | | | | | |

testers located in the Quality Office

| QC 18 INSPECTION | ENGINEERING SIGNOFF (if required) |
|---|-------------------------------------|
| INSPECTED BY: <u>[Signature]</u> DATE: <u>16/11/13</u> | SIGNED OFF BY: _____ DATE: _____ |

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T6TS1.000
 DATE: 11/11/13

PO / BATCH NO.: 34165/136101

MATERIAL CERT REC'D: Y
 QUANTITY RECEIVED: 21.083
 QUANTITY INSPECTED: 21.083
 QUANTITY REJECTED: _____

THICKNESS ORDERED: 1.00
 THICKNESS RECEIVED: 1.00
 SHEET SIZE ORDERED: _____
 SHEET SIZE RECEIVED: _____

| DESCRIPTION | NCR (Check Y/N) | COMMENTS |
|--|---------------------------------------|-------------------------|
| SURFACE DAMAGE | Y <input checked="" type="checkbox"/> | |
| CORRECT FINISH | <input checked="" type="checkbox"/> N | |
| CORROSION | Y <input checked="" type="checkbox"/> | |
| CORRECT GRAIN DIRECTION | <input checked="" type="checkbox"/> N | |
| CORRECT MATERIAL | <input checked="" type="checkbox"/> N | <u>6061T6</u> |
| CORRECT THICKNESS | <input checked="" type="checkbox"/> N | <u>1.00</u> |
| PHOTO REQUIRED | Y <input checked="" type="checkbox"/> | |
| CORRECT MATERIAL | <input checked="" type="checkbox"/> N | <u>AMS-QQ-A-200/8</u> |
| CORRECT REF # TO LINK CERT | <input checked="" type="checkbox"/> N | <u>HEAT # 201617624</u> |
| CORRECT MATERIAL IDENTIFICATION | <input checked="" type="checkbox"/> N | <u>M6061T6TS 1.00</u> |
| CORRECT M# ON THE MATERIAL | <input checked="" type="checkbox"/> N | <u>M136101</u> |
| DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF | Y <input checked="" type="checkbox"/> | |
| DOES THIS REQUIRE AN EXTRUSION REPORT | Y <input checked="" type="checkbox"/> | |

| CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW | | | | |
|--|-----|-----|-------|-------|
| TYPE OF MATERIAL | HRC | HRB | DUR A | DUR D |
| SIZE OF TEST SAMPLE | | | | |
| HARDNESS / DUROMETER READING | | | | |

testers located in the Quality Office

| QC 18 INSPECTION | ENGINEERING SIGNOFF (if required) |
|---|-------------------------------------|
| INSPECTED BY: <u>[Signature]</u> DATE: <u>11/11/13</u> | SIGNED OFF BY: _____ DATE: _____ |

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO34165**

Purchase Order Date 11/3/2016

PO Print Date 11/3/2016

Page Number 1 of 2

Order From :

TW METALS
PO BOX 933014
ALTANTA, GA 31193-3014
US

VU-TWM001

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAILED

NOV 03 2016

Contact Name

Vendor Phone 585 768 5600

Ship To Contact

Ship To Phone

Ship Via: YRC COLLECT

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms Net 30

Currency USD

FOB FCA - (Free Carrier)

| Line Nbr | Reference Vendor Part Number Line Comments Delivery Comments | Description/ Mfg ID | Req Date/ Taxable Promise Date | CD | Req Qty/ Unit of Measure | PO Unit Price | Extended Price |
|--|--|-----------------------------|--------------------------------------|----|--------------------------------|---------------|----------------------|
| 1 | M6061T6T0.3125W.058 | ALUM TUBE .3125 x .058w | 11/10/2016 Yes 11/10/2016 | | 48.00 f | \$2.50 | \$120.00 |
| MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING AS PER WW-T-700/6 OR QQ-A-200/8 OR QQ-A-225/8 OR AMS 4080 OR AMS 4082 OR AMS 4083 OR ASTM B210 OR ASTM B241 | | | | | | | Line Total: \$120.00 |
| 2 | M6061T6T0.375W.058 | 6061-T6 RD Tube .375 x.058W | 11/10/2016 Yes 11/10/2016 | | 48.00 f | \$2.15 | \$103.20 |
| MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING AS PER WW-T-700/6 OR QQ-A-200/8 OR QQ-A-225/8 OR AMS 4080 OR AMS 4082 OR AMS 4083 OR ASTM B210 OR ASTM B241 | | | | | | | Line Total: \$103.20 |

DAS
26
9-89

NOV 10 2016

Note:

11/3/2016



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO34165**

Purchase Order Date 11/3/2016

PO Print Date 11/3/2016

Page Number 2 of 2

Order From :

VU-TWM001

TW METALS
PO BOX 933014
ALTANTA, GA 31193-3014
US

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 585 768 5600

Ship To Contact

Ship To Phone

Ship Via:

YRC COLLECT

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

USD

FOB

FCA - (Free Carrier)

| | | | | | | |
|---|---------------------|---------------------------------------|------------|-------|--------|---------|
| 3 | M6061T6TS1.000W.120 | 6061T6 SQ TUBE 1.00 X 1.00 X .120w | 11/10/2016 | 20.00 | \$2.00 | \$40.00 |
|---|---------------------|---------------------------------------|------------|-------|--------|---------|

Yes

f

MATERIAL: 6061-T6/T651/T6510/T6511T62 SQUARE TUBING
PER AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR
AMS-QQ-A-200/8 OR AMS 4160

NOTE: FLAT EDGE

recd 21.083

Line Total: \$40.00

| | | | | | | |
|---|----------|-----------------------------|------------|------|--------|--------|
| 4 | 71401-45 | procurement quality clauses | 11/10/2016 | 1.00 | \$0.00 | \$0.00 |
|---|----------|-----------------------------|------------|------|--------|--------|

No

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification
A026 certification of material conformance
A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

11/10/2016

NOV 10 2016

DAS
26
9-89

Line Total: \$0.00

PO Total: \$263.20

h
ca

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr: 1

Change Date: 11/3/2016